

CACTUS AND SUCCULENT JOURNAL

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Of America

Vol. XV

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No. 1



FIG. 1. *Echinocereus pensilis* K. Brandege. See pg. 2.
Photo by Graham Heid



CACTUS AND SUCCULENT JOURNAL

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Vol. XV

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STIGMA-COLOR IN ECHINOCEREUS

Although Engelmann did not seem to stress the character when he first set up the genus *Echinocereus*, all writers since have considered green stigma lobes as an infallible hallmark of the genus. The flower of *E. pensilis* (K. Brandegee) is an exception. Five flowers on two different, field-collected plants, all had creamy-white stigma lobes with no hint of green. Further observation of many flowers may show the stigma color to be variable, but this would seem doubtful.

It is my understanding that the stigma lobes of Mr. Gates', as yet undescribed species, *Echinocereus Fereirrae*, also has white stigma lobes, but I have not seen the flower of this species.

GRAHAM HEID.

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During times of stress, people invariably turn to something that will take their minds off the constant world turmoil. The study and collecting of cacti fills such a want, as evidenced by the ever increasing membership in the Society.

Mr. Haselton, the Editor and Publisher of the "Bulletin" feels it necessary to discontinue that publication for the duration, not through any lack of interest, but so as to have sufficient supplies to continue the high quality of the JOURNAL.

Best wishes to all our members for the new year.

ERVIN STRONG

THANKS TO HIROHITO AND HITLER
FOR UNITY

Contrary to the general impression, there is more interest in cacti and succulents, cactus meetings, and literature than ever before. The recent Board meeting of the Society was the best attended and one of the most enthusiastic ever held. Among other things a plan is being worked out of interest to affiliates.

Dr. R. T. Craig reported the completion of over 100 "cuts" for the Mammillaria Monograph.

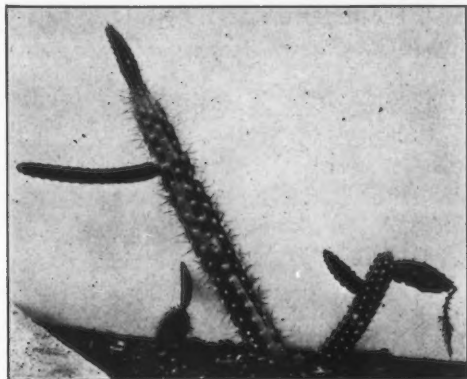
Hummel's Exotic Gardens is producing a 48-page picture book of cacti and succulents as a good will project to stimulate interest in plants for the good of the cause.

The Editor reported that 125 "cuts" have been made for the JOURNAL besides all of the "cuts" to complete the Werdermann reprint.

Does that look like disintegration?

BINDING JOURNALS

If you have not already done so, mail your Vol. XIV of the Journal and Bulletin for binding the minute you read this notice. See page 162 of the Dec. issue for instructions.

FIG. 2. *Harrisia Nashii*.

Harrisia Nashii

By WM. TAYLOR MARSHALL

In "Cactaceae," page 96, I wrote: "Associated with this species (*Harrisia Hurstii*) is another *Harrisia* which I will call *H. fimbriata* (Lamarck) Knuth var. *straminea* var. nov. This is a variety of the plant described by Britton and Rose as *H. Nashii* and differs from the type in having 7 radial spines and 4 central spines all straw-colored instead of the 3 to 6 gray spines of the type plant from the western end of Hispanola."

The selection of the name *H. fimbriata* was made to conform with the treatment of Backeberg and Knuth in "Kaktus A.B.C.," 309, 1935, who assumed that Lamarck's *Cactus fimbriatus* was identical with the plant later described by Britton as *H. Nashii*. Britton and Rose in "The Cactaceae," Vol. II, 151, under the heading of *H. Nashii* say, "Here perhaps is to be referred *Cactus fimbriatus* Lamarck (Encycl. I: 539, 1783)."

I am indebted to Dr. Leon Croizat of the Arnold Arboretum for having called to my attention that in addition to the conflict noted above, Dr. Werdermann claims (in Fedde Rept. 29: 237-239, 1941) that *Cactus fimbriatus* is to be treated as *Cereus fimbriatus* and is a good species in its own right, while *Harrisia Nashii* is a synonym of *Cereus divaricatus*.

Dr. Croizat says, "*Cactus fimbriatus* is a name of uncertain application (Art. 63 of the Rules: *nomen dubium*) which no author has succeeded as certifying in definite and clean-cut manner,

according to the requirements of Art. 17 and Rec. xxxvii. Its treatment as a full taxonomic equivalent of *Harrisia Nashii* is not earlier than 1935, while *H. Nashii* was legitimately published in 1908, so the name *Harrisia fimbriata* (Lam.) Knuth in "Kaktus A.B.C." is to be rejected, and *H. Nashii* is to be maintained by those who believe that the two are synonyms."

As the variety first mentioned has not been validly published because it was not accompanied by a Latin description, I publish here-with *Harrisia Nashii* Britton *straminea* var. nov.

A planta typica (in Hispaniola circa Monte Christi endemica) differt aculeis totis stramineis, radialibus 7, centralibus 4, neque 3-6, griseis.

The type of *Harrisia Nashii* comes from the district between Gonaïves and Plaisance, Haiti, while the variety seems to be generally distributed throughout the cactus district in the north western portion of the Dominican Republic where it is associated with *Harrisia Hurstii*. The two plants resemble each other in spine count and spine color, but *H. Nashii* var. *straminea* has its branches divaricately spreading and has long ellipsoid fruit, while *H. Hurstii* has strict branches and short, obovate fruit. The flowering period of the two species differs by at least a month, according to Capt. Hurst.

A young branch and a fruit of *Harrisia Nashii* var. *straminea*, and a branch and fruit of *Harrisia Hurstii* have been forwarded to the herbarium of the Arnold Arboretum to exemplify and to typify the present publication.

COMMON NAMES OF CACTI AND SUCCULENTS

Compiled by WM. TAYLOR MARSHALL and SCOTT HASELTON

CACTI

- A
Arizona Giant—*Carnegiea gigantea*
Agave Cactus—*Leuchtenbergia principis*
Aztec Cactus—*Aztekium Ritteri*
- B
Barbados Gooseberry—*Pereskia aculeata*
Barbwire Cactus—*Acanthocereus pentagonus*
Barrel Cactus—Any species of *Ferocactus*
Beaver Tail Cactus—*Opuntia basilaris*
Bird's Nest Cactus—*Mammillaria camptotricha*
Bishop's Cap—*Astrophytum myriostigma*
Blind Pear—*Opuntia rufida*
Boxing Glove—*Opuntia mamillata cristata*
Brain Cactus—Any species of *Stenocactus*
Buckhorn Cactus—*Opuntia acanthocarpa*
Bunny Ears—*Opuntia microdasys*
Burbank's Spineless—*Opuntia ficus indica*
Button Cactus—*Epithelantha micromeris*
- C
Chain Cactus—*Rhipsalis paradoxa*
Chin Cactus—*Gymnocalycium* species
Cholla Cactus (Choya)—Any spiny species of cylindrical *Opuntias*
Christmas Cactus—*Zygocactus truncatus*
Claret Cup Cactus—*Echinocereus triglochidiatus*
Cob Cactus—*Echinocereus Reichenbachii*
Cotton Ball—*Euphorbia lanata*
Cow's Tongue—*Opuntia linguiformis*
Crab Cactus—*Zygocactus truncatus*
Creeping Devil Cactus—*Machaerocereus eruca*
Crown Cactus—Species of *Rebutia*
Curiosity Plant—*Cereus monstrosus*
- D
Dahlia Cactus—Any species of *Wilcoxia* or *Peniocereus*
Deerhorn Cactus—*Peniocereus Greggii*
Devil Cactus—Any species of prostrate *Opuntia* especially *O. Schottii*
Dope Cactus—*Lophophora Williamsii*
Dry Whiskey—*Lophophora Williamsii*
- E
Easter Cactus—*Schlumbergera Gaertneri*
Easter Lily Cactus—Any species of *Echinopsis*
Empress of Germany—*Nopalxochia phyllanthoides* and its hybrids.
- F
Feather Cactus—*Mammillaria plumosa*
Firecracker Cactus—*Cleistocactus Baumannii*
Fishbone Cactus—*Epiphyllum anguliger*
Fish-hook Cactus—Any species of *Ferocactus*, *Mammillaria*, etc., with hooked spines
Fox-tail Cactus—*Coryphantha desertii*
Fragile *Opuntia*—*Opuntia fragilis*
- G
Giant Cactus—*Carnegiea gigantea* (Saguaro)
Grizzly Bear Cactus—*Opuntia erinacea* and *O. ursina*
Golden Ball Cactus—*Notocactus Leninghausii*
Golden Barrel Cactus—*Echinocactus Grusonii*
Golden Star Cactus—*Mammillaria elongata*
- H
Hedgehog Cactus—Any species of *Echinocereus*
Horse Crippler Cactus—*Hemalocephala texensis*
- I
Indian Comb—*Pachycereus pecten-aboriginum*
Indian Fig—*Opuntia ficus-indica*
- J
Joseph's Coat Cactus—*Opuntia monacantha variegata*

J (continued)

- Jumping Cactus—*Opuntia Bigelovii* or *Opuntia fulgida*
- L
Lace Cactus—*Echinocereus Reichenbachii*
Lady Finger—*Mammillaria elongata*
Lamb's Tail Cactus—*Wilcoxia Schmollii* (*W. senilis*)
Large Flowered *Opuntia*—*O. grandiflora*
Living Rock Cactus—*Ariocarpus fissuratus* or any *Ariocarpus*
- M
Mescal Button—*Lophophora Williamsii*
Mexican Giant Barrel—*Echinocactus ingens*
Midget Cactus—*Frailea* species
Mission Cactus—*Opuntia megacantha*
Mistletoe Cactus—*Rhipsalis* species
Moon Cereus—*Selenicereus* species
Myrtle Cactus—Any species of *Myrtillocactus*
- N
Niggerhead Cactus—*Echinocactus horzontalonus*
Night Blooming Cereus—Any of about 500 species of night bloomers but especially *Nyctocereus serpentinus*
Nipple Cactus—*Dolichothelae sphaerica*
- O
Old Lady Cactus—*Echinocereus Delaetii*
Old Man Cactus—*Cephalocereus senilis*
Old Man of the Andes—Any species of *Oreocereus*
Old Man *Opuntia*—*Opuntia vititia*
Old Woman Cactus—*Mammillaria Habniana*
Orchid Cactus—The hybrids of *Epiphyllum*
Organ Pipe Cactus—*Lemaireocereus marginatus* also *Lemaireocereus Thurberi*
- P
Paper Spined Cactus—*Toumeyia papyracantha*
Paper Spined Pear—*Opuntia glomerata*
Peanut Cactus—*Chamaecereus Silvestrii*
Pencil Cactus—*Opuntia ramosissima*
Pigmy Cactus—*Frailea* species
Pin Cushion Cactus—Any straight spined species of globose *Mammillaria*
Pine Cone Cactus—*Encephalocarpus strobiliformis*
Pineapple Cactus—*Echinomastus uncinatus*
Popcorn Cactus—*Rhipsalis cereuscula*
Powder Puff Cactus—*Mammillaria Bocasana*
Prickly Pear—Any species of flat-stemmed *Opuntia* (*Platyopuntia*)
- Q
Queen of the Night—Many species of large flowered, night bloomers, especially *Hylocereus undatus*, and *Peniocereus Greggii*
- R
Ribbon Cactus—*Oreocereus turpinii*
Rainbow Cactus—*Echinocereus rigidissimus*
Rat-Tail Cactus—Any species of *Aporocactus*
- S
Saguaro—*Carnegiea gigantea* (Giant Cactus)
Scarlet Bugler—*Cleistocactus Baumannii*
Sea Urchin Cactus—*Astrophytum asterias*
Silver Ball Cactus—*Notocactus scopia*
Silver Tip—*Lemaireocereus beneckii*
Silver Torch Cactus—*Cleistocactus Straussii*
Snake or Serpent Cactus—*Nyctocereus serpentinus*
Snow Ball Cactus—*Mammillaria Bocasana* var. *inermis* and *Euphorbia lanata*
Star Cactus—*Astrophytum ornatum*
Strawberry Cactus—Most species of *Mammillaria*
Sun Cereus—*Helicocereus speciosus*

T
 Thanksgiving Cactus—*Zygocactus salmonea*
 Thimble Cactus—*Mammillaria fragilis*
 Tom Thumb—*Parodia aureispina*
 Torch Cactus—Any tall-growing, erect *Trichocereus*
 Totem Pole—*Lophocereus Schottii monstrosus*
 Tree Cactus—*Dendrocereus nudiflorus*
 Turk's Cap—Any species of *Melocactus*
 Turk's Head—*Hamatocactus hamatacanthus*
 Twisted Rib—*Hamatocactus setispinus*

W
 Wicker Ware Cactus—The round stemmed species of
Rhipsalis
 Woolly Sheep—*Opuntia floccosa*

SUCCULENTS

A
 Arab's Turban—*Crassula hemisphaerica*
 Areoplane Plant—*Crassula falcata*

B
 Baby Joshua Tree—*Sedum nulticeps*
 Baby Toes—*Fenestraria rhopalophylla*
 Boston Bean—*Sedum Stahlii*
 Burro's Tail—*Sedum Morganianum*

C
 Candle Plant—*Kleinia articulata*
 Candle-wood—*Fouquieria splendens*
 Century Plant—*Agave Americana*
 Chalk Lettuce—*Dudleya pulverulenta*
 Chenille Plant—*Echeveria pulvinata*
 Christmas Cheer—*Sedum guatemalense*
 Climbing Aloe—*Aloe ciliaris*
 Cobweb Houseleek—*Sempervivum arachnoideum*
 Cone Plant—*Conophytum*
 Corn Cob—*Euphorbia mammillaris*
 Crown of Thorns—*Euphorbia splendens*

D
 Devil's Coach Whip—*Fouquieria splendens*

E
 Elephant's Foot—*Testudinaria elephantiipes*
 Elephant Grass—*Portulacaria afra*
 Elephant Tree—*Pachycornis discolor*
 Elk Horns—*Hereroa Neli*

F
 Fig Marigold—Bushy species of *Mesembryanthemum*

G
 Ghost Plant—*Graptopetalum paraguayense* (*Echeveria Weinbergii*) and *Diplocyathia ciliata*
 Gingham Golf Ball—*Euphorbia obesa*
 Goat's Horns—*Cheiridopsis candidissima*
 Good Luck Plant—*Sanseveria*
 Green Roses—*Greenovia dodderalis* (*G. gracilis*)

H
 Hedgehog Aloe—*Aloe humilis*
 Hemp Plant—*Agave sisalana*
 Hen and Chickens—*Echeveria secunda-glauca*
 Houseleek—*Sempervivum*

I
 Ice Plant—*Mesembryanthemum cristallinum*
 Inch Worm—*Kleinia pendula*

J
 Jade Plant—*Crassula argentea*
 Joshua Tree—*Cleistoyucca brevifolia* (arborescens)

L
 Lamb's Tongue—*Agrinictus agninum*
 Little Pickles—*Otbonna crassifolia*
 Live Forever—*Sempervivum*
 Living Telegraph Pole—*Idria columnaris*
 Lobster Claws—*Cheiridopsis Pillansii*
 Lord's Candle—*Hesperoyucca Whipplei*

M
 Medusa Head—*Euphorbia caput-medusae*
 Mexican Love Plant—*Bryophyllum pinnatum*
 Mother-in-law's Tongue—*Gasteria*

N
 Necklace Vine—*Crassula rupestris* or *C. perforata*

O
 Ocotillo—*Fouquieria splendens*
 Our Lord's Candle—*Hesperoyucca Whipplei*

P
 Pagoda Plant—*Crassula* sp.
 Painted Lady—*Echeveria Derenbergii*
 Panda Plant—*Kalanchoe tomentosa*
 Partridge Breast—*Aloe variegata*
 Plover Eggs—*Adromischus Cooperi*
 Pussy Ears—*Cyanotis somaliensis*

R
 Rosary Plant—*Crassula rupestris*
 Rosary Vine—*Ceropegia Woodii*

S
 Sand Rose—*Anacampseros telephium*
 Silver Beads—*Crassula deltoidea*
 Silverskin—*Argyrodema testiculare*
 Slipper Flower—*Pedilanthus macrocarpus*
 Soap Tree—*Yucca elata*
 Spanish Bayonet—*Yucca baccata*
 Spanish Dagger—*Yucca mojaveensis*
 Spiderweb Houseleek—*Sempervivum arachnoideum*
 Spoon Flower—*Dasyllirion Wheeleri*
 Stone Face—In the genera *Lirops*, *Lapidaria*, *Rimaria*, and *Argyrodema*
 Stonecrops—Members of the genus *Sedum*

T
 Tiger Jaw—*Faucaria tigrina* and other species
 Tongue Leaf—*Glottiphyllum linguiforme*
 Totem Pole—*Idria columnaris*
 Torch Plant—*Aloe arborescens*

U
 Umbrella Flower—*Ceropegia Woodii*

V
 Velvet Leaf—*Kalanchoe behavensis*
 Victory Plant—*Cheiridopsis candidissima*

W
 Wart Plant—Several species of *Haworthias*
 Windowed Plant—*Haworthia cymbiformis* and *Fenestraria*

IMPORTANT: Please check against your list and send additions to the JOURNAL. As soon as this list is revised we will distribute it to dealers all over the country. Please send in your list promptly.

Notes on Haworthias

By J. R. BROWN

Haworthia willowmorensis Poelln. in Repert. Sp. Nov. XLI (1937) 216, XLII (1938) 106, in Cact. Journ. VI (1937) 36, in Beitr. zur Sukk. (1939) 45. photo.

Plant stemless, 3.5-4 cm. in diam.

Leaves few, erect-spreading, about 3 cm. long, 10-12 mm. wide, from about the middle to the tip somewhat pellucid and obliquely retuse, back

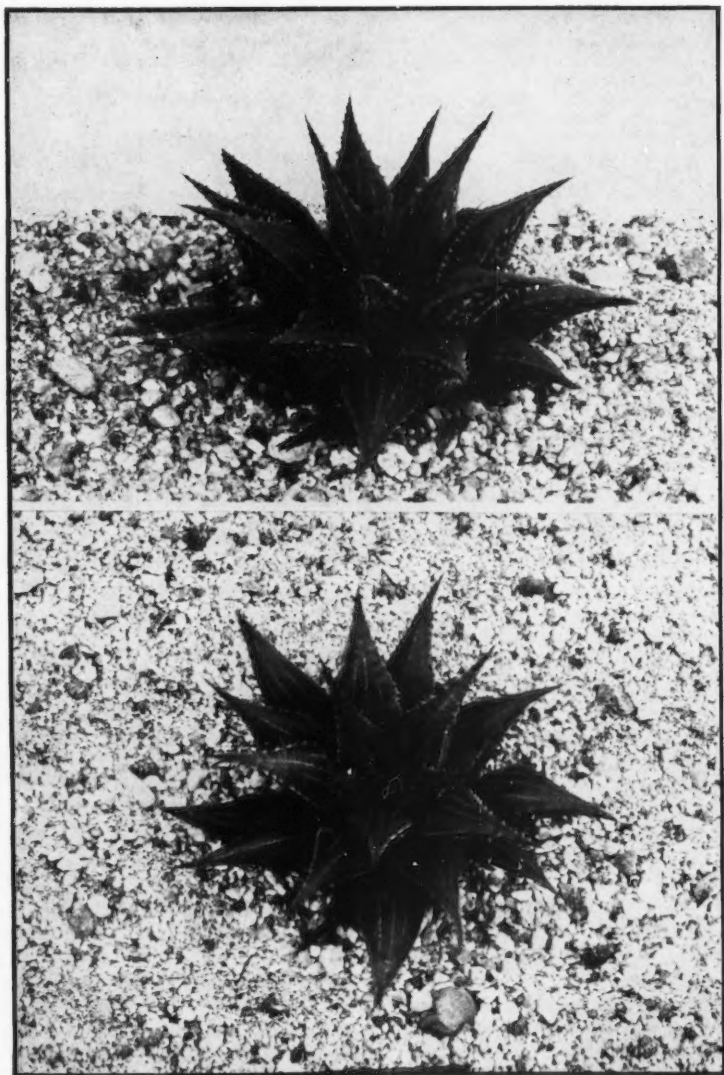


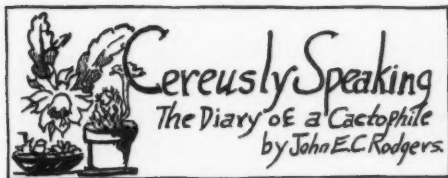
FIG. 3. *Haworthia willowmorensis* Poelln. nat. size.

rounded, obliquely keeled in the upper part, somewhat reddish-green, from about the middle to the tip with very small, whitish pellucid, more or less oblong warts in lengthwise rows, the margins and keel with minute teeth, about 0.5 mm. long, the terminal bristle 1-2 mm. long. The somewhat pellucid leaf faces ovate-deltoid, acuminate, 16-20 mm. long, about 10 mm. wide at the base, sometimes slightly curving laterally towards the tip, somewhat convex and roughened with minute, very obtuse, concolorous warts, with 3-5 green lines and often with more, extremely shorter ones.

Locality: Type locality, Willowmore.

The plant shown in the photo illustrating this *Haworthia* has been cultivated for several years, the leaves have become more spreading, the leaf faces are smoother and many of the little warts have developed a small pellucid tooth and the leaves may attain a length of 4 cm. The plant may vary from 4 to 8 cm. in diam. depending on whether, due to the condition under which it is grown, the leaves are more expanded or more contracted and erect.

Haworthia willowmorensis of the sect. *Retusae* Haw. is at once distinct from other closely related spp., by the long acuminate leaf faces.



EDITOR'S NOTE: During the year of 1942 "Cereusly Speaking" was one of the most popular features written for the amateur. For 1943 we have asked John Rodgers to dwell on culture or "Cactus Clues." As he says, "Really it is my own work guide which, teacher-like, I write out at the beginning of each month and try to follow during the spare time I have now for my green house." To even a Californian, where cacti bask in glorious sunshine 366 days of the year, it is interesting to note that plants in his glasshouse are already budded and flowering while these same plants here out-of-doors are still waiting for frosts or rain! John has promised us some pictures of his glasshouse so we can visualize his growing conditions. Send him a note of appreciation or ask questions—it will add interest to his page. Address him as "Winchell of Cactophiles," 1229 W. 8th St., Lorain, Ohio.

CULTURE IN OHIO

January 1, 1943. I hold to the frequent advice given to withhold water at this time of year, yet I follow my own system of top sprinkling with tepid water (warm water to avoid chilling) to keep off the dirt. Keeps the fine root systems alive and supplies moisture, yet not enough to encourage growth. "Volcked" several plants for scale, mealy bug, or spine bug. Can't quite see my plants with "bloom" (that delicate powdery covering on some plants) ruined with an oily emulsion, so I mixed up some Sheps* and sprayed them. More than satisfied with the fungicide Eugene Ziegler recommended to me in 1931. Had bought several plants with black fungus which likes to grow in sugary secretions from the glands of some of the Coryphanthas. The mixture worked. Gene uses it for algae which grows on the surface of the soil about his seedlings. The treatment also kills the fungus in the honey dew secretions of Mealy Bugs mentioned in the article by Robert S. Woods in the JOURNAL, Sept., 1942. The formula calls for 1 ounce of copper sulphate to 10 gallons of water. Needless to say I never mix it in ten gallon lots for my small house. *Mammillaria Collinsii* and *Rhipsalis "Shafteri"* budded.

Jan. 3. Buds on *Epiphyllum ackermannii* show color although not more than 1/4 inch long. Pink bumps under the skin on *Echinocereus Knippelianus* will soon be breaking through and then glorious flowers. *Rebutia miniscula* budded—plants shrivelled but buds are fat and colorful. *Mam. hemisphaerica* and *runyonii* wreathed with buds.

Jan. 5. *Aloe ciliaris*, one of the thin-stemmed types, has buds. *A. variegata*, which I have kept dry in a 3-inch pot, has rewarded me with buds. Has been a toss-up whether to use a rich soil mixture or a lean type but the leaner soil has won. Have three *variegatas* growing in three mixtures: (1) Rich well drained humus grows a fine plant; (2) Clay-sand mixture, a sturdy slow growing type; (3) But the second year of buds on the third plant gives the edge to the 2 parts

sand, 3 parts garden loam, 1 part sifted leaf mold, and 1 part medium size gravel mixture.

Jan. 9. *Trichocereus spachianus* growing steadily without a stricture anywhere. Even *Nyctocereus serpentinus* has only the slightest growth-resuming mark. I feel more assured that my greenhouse provides sufficient light for normal growth. *Selenicereus hamatus* is now dormant after a race with my greenhouse space; it has left a little space to resume growth next month.

Jan. 12. Used a regular potting soil when I planted a 3-inch offset from *Rocbea fulcata* two years ago. It is now 8 inches high and has two offsets. The rust that was on the stem of this, as well as the original, has disappeared. Less water and better drainage does the trick.

Jan. 14. *Aeonium atropurpureum cristata* (a five cent bargain only 2 inches tall when I got it in 1940) is a foot high now with 2 five-inch crests. I used rich potting soil with a gravel covering to retain moisture.

Jan. 17. Compact *Mesemb. blandum* in 1943 looks very different from the scrawny yellow ones I used to have in the early 30's. It is one thing to say water sparingly, and another to hold to it, but this plant does prove the saying "Spare the water and grow the plant."

Jan. 19. *Gibbaeum molle* always attracts attention with its silvery green stems but for sheer white beauty, *Kleinia tomentosa* can't be surpassed. I have a red leaved *Kalanchoe* and the blue *Kleinia repens* along with the white *Kleinia tomentosa*—patriotic plants even if they are from foreign ports.

Jan. 23. *Opuntia clavarioides cristata* growing on its own roots for over two years in a mixture of sand and chopped sphagnum, half and half, which drains rapidly. It is my last resort for one of the slow growers. (Must be grafted to grow, so I hear.) Has doubled in size, has 3 fingers.

Jan. 25. The *Echinopses* are undergoing a special treatment this winter. Have stored them on a shelf in a small well lighted room off my greenhouse, where they can rest with light watering once a week. So many of the species and varieties do not bloom that I am being drastic now. I have coddled, cajoled, and threatened and now I "have taken steps." Results—well, we'll see.

Jan. 29. *Echinocereus perbellus* budded. Got my galley proof for the first "Cereusly Speaking" this date one year ago. My diary which concerned only me and my plants for these nine years, was being put into print, so that "all who run may read." Ah me! My "V for Victory" plant, as my daughters call it, is starting new growth—*Cheiridopsis candidissima*.

Jan. 30. *Harioia salicornioides* in bloom. Never fails me at this time of year. Almost soilless, as roots have climbed over top of meager soil until network covers what water hasn't washed out. I got it in March, 1933, when it was a sprig. Started to bloom in 1936. Has been in same soil since 1937. Looks healthy and puts on new growth each spring. Rests in late fall. Buds on new growth only.

CULTURE CUES FOR JANUARY

1. Keep greenhouse temperature between 50 and 60 degrees. (Nothing is gained by extra heat and coal comes high.)

2. Clean out shelves and spray with fungicide and insecticide. Sterilize tray sand. (Up here we put sand or dirt in a large pan, moisten slightly, set the over thermostat at 275°, and let "cook" for at least four hours.)

3. Sterilize soil and mix various soils for spring potting. Mark plants which need repotting.

4. Select "shelf lighteners" (Dr. Machwart's name

*John, please give us exact names of insecticides, address of manufacture, and costs in your Feb. column. S. H.

for the duplicate plants which he gives or trades with other cactophiles).

5. Make plans for annual exhibit of plants while they are dormant. (Experience has shown they suffer little if exhibited this time of year, or not later than March. Encourages new collectors.)

6. Get early blooming Epiphyllums into best light possible.

7. Begin watering seedlings which show growth.

8. Watch Astrophytum. (They are worse than bathing beauties for sunburn—*A. asterias* was burned badly in Feb., 1942.)

9. Observe "Southwesterners" for insect pests, red spider, especially. Used "Black Leaf 40" last year for those in greenhouse. Flowers of sulphur dust for those in basement.)

10. Give special attention to the following plants which have budded or bloomed in February in previous years:

Succulents: *Gasteria*, *Haworthia*, *Kalanchoe*, *Bryophyllum*, *Sanseveria*, *Euphorbia candelabrum*, *E. fourneri*, *E. fulgens*, and *E. splendens*, *Aptenia cordifolia*, *Crassula multicava*, *Glotiphyllum grandiflora*.

Cacti: *Rhipsalis*, *Schlumbergeria*, *Astrophytum*, *Aporocactus*, *Wilcoxia*, *Echinopsis albiflora*, *Ferocactus uncinatus*, *Mammillarias: stella, aurata, elongata, wildii*, and *pymatbele*, *Echinocereus reichenbachii*, *Gymnocalycium platense*, and *G. megalothelos*.

BOOK REVIEW

"Flowers, Rock Plants" \$5.00. Drawings by Arlette Davids. Preface by Henry De Montherlant. Translated from the French by S. P. Skipwith. Published in 1939 by the Hyperion Press, Paris, France.

This book is misnamed, it should be titled, "Flowers of Cacti and Succulents." It is strictly an art book, containing forty colored plates of hand drawings. There is no botanical information whatsoever. Since there are not many publications in color of these plants this book is very interesting. Some of the genera shown are: *Opuntia*, *Epiphyllum*, *Mammillaria*, *Notoctactus*, *Gymnocalycium*, *Aporocactus*, *Aloe*, *Kalanchoe*, *Echeveria*, *Sedum*, *Mesembryanthemum* and *Euphorbia*.

D. NEUMANN, JR.

NEW CATALOGUES

R. W. Kelly, 2410 La Rosa Drive, Temple City, California. A 24-page illustrated retail price list for 1943 shows the optimism of one of the few retailers. Support and encouragement of such dealers are essential to the future of cactus interest. Send a dime for this new list of cacti and succulents and follow it up with an order for some new blood for your collection.

Hummel's Exotic Gardens, 4848 Imperial Highway, Inglewood, California, has just issued a new Wholesale Price List showing pictures of 68 of the plants in their Wonder Collection. Dealers in the East can do a great deal to stimulate collecting by showing these colorful collections. List is free to dealers requesting it one their business letter heads.

Albert Arozana, 1518 E. Rosecrans Ave., Compton, California, has issued his Dec., 1942, and Jan., 1943, mimeo price list for wholesalers.

GASTERIA COLLECTION

Dr. Frank T. McFarland of the University of Kentucky lists 60 *Gasterias* in his collection. He finds this a very satisfactory genus to study and they are practically pest free which makes them welcome for pot or garden culture.

CACTUS AND SUCCULENT SOCIETY OF PHILADELPHIA

This is a new name in the annals of the JOURNAL but it is a reality at last. The slow city of "Brotherly Love" has finally produced a number of cactophiles who have pledged themselves to make every effort to build up a real live group which will eventually surpass all other Societies in the country, California only excepted! In spite of the pressure and uncertainty of the times it is felt that such an undertaking can and should be successful especially because of the relaxation one gets from working with and talking about cacti and other succulents.

The initial meeting was held on November 15, at the home of Malcom Martin, Deputy Regional Vice-President, at which time it was decided to meet once a month at the various members' homes. Included in the group are some windowill collectors, some seedling growers, and some grafters. Whatever the extent of your interest, whether on the hobby side or on the scientific side, why don't you join with the group and enjoy congenial and informative meetings with other "Cactus Nuts?" Get in touch with A. Malcom Martin at 3628 N. 4th Street, for further information.

One of the monthly features is to be the identification of plants as a means of increasing the ability to recognize them and to develop a vocabulary on nomenclature. Colored slides shown by Alfred Boysen was a feature at the first meeting. Raising seedlings, pest control, grafting, Eastern state culture, and plant collecting are a few of the topics planned for future meetings.

A. M. MARTIN.

FROM AUSTRALIA

I am sorry to say we Cactus lovers in Australia have fallen on evil times as a few months ago the Government, without any warning at all, placed an embargo on the importation of any species of cactus plant or seed, partly to conserve the dollar exchange and partly because a few species of *Opuntia* had become a pest in certain parts of the country. Needless to say when the War is over we will move heaven and earth to have the embargo removed. For some time I think the foul deed will lessen the growing interest in cacti here as the dealers have plenty big stocks of plants and seeds and can propagate most of the popular varieties.

For me it is tragic as the dealers here cannot supply the species I want. For some years past I have had to import my own.

I would like to tell you what I think of "Succulents for the Amateur"—Brown, but if I do you might take up valuable space in the JOURNAL by publishing it, so I must refrain and just say it is easily the best hypodermic syringe I know of for introducing the fatal germ.

For a long time now I have had a guilty conscience and feel I am not giving enough support to the JOURNAL, inasmuch as I have not yet sent you the long promised articles. I do hope now that the winter is here, I will be able to find time to do something for the JOURNAL in return for all the help it gives me. I was very grieved when the English Cactus Journal stopped publication as I was hoping there might be close cooperation between the two Societies, especially regarding nomenclature.

AN AUSTRALIAN MEMBER.

CORRECTION

Did you notice the glaring error in the caption of the victory illustration on the cover of last month's JOURNAL and BULLETIN? Please change "pores" to "glands" quickly before the botanists discover it.

USE YOUR ATTIC

I was very much interested in Mr. Gerderman's experiments* on the hardiness of cacti. He deserves much credit for the experiments he has undertaken and for his most excellent report. It will give the rest of us something to go by.

For the past four years I have also been carrying on experiments in regards to the hardiness of cacti although on a smaller scale. Here in Amboy, Illinois, I am much farther north than Warrentown, Missouri, and my experiments so far have proved to me it isn't the cold that kills our cacti during the winter, but a combination of cold and wet, also freezing and thawing.

To us in the north and east, the wintering of cacti is our hardest problem. Even with the many soil combinations used we are all pretty successful with our cacti during the summer. Many of us have them arranged in beautiful rock-gardens and by fall they are usually a most beautiful sight. Then it almost breaks our hearts to have to tear up the garden and take our collection indoors. Some of us wait until the last second before our killing frost. For those who have a greenhouse the problem is different, yet we all wish we could have a nice collection that would remain outdoors the year around.

My rock-garden is raised from a couple inches to 2 feet above the lawn level. I dug out the dirt to a depth of several inches and in the bottom have a 2-inch layer of heavy crushed road limestone. Where I experimented with hardy cacti on top of this I placed my mixture of garden loam, sand, charcoal, etc. The following cacti have wintered successfully outdoors for 4 winters, growing each summer, also blooming: *Opuntia compressa*, *O. fragilis* (this cactus, both from Kansas and Wisconsin), *O. polycantha* from Wyoming, *O. rafinesquei* from Wisconsin, *O. basilaris* var. *aurea* from Utah. I also have two more *Opuntias*, one from Arkansas and one from Iowa that also wintered. The shape of the pads, color, spine structure are different than either *Opuntia compressa* or *polycantha*. Also *Neobesseya missouriensis*, *Echinocereus viridiflorus* have wintered O.K. The top of *Opuntia whipplei* winter kills, but every years it comes up from the main stem and renews its growth.

The following winter killed completely: *Opuntia imbricata* (a 2-foot plant killed in January, 1941), *O. leptocaulis* in January, 1941, *O. clavata* in January, 1941, (doubt if it was thoroughly established), *Coryphantha vivipara* killed in December, 1942, (It was from Okla-

homa and I doubt if it was established as it was planted in September), *Homalocephala texensis* killed in January, 1941.

I noticed in the April, 1942 issue, our genial Editor would like to have me report on the wintering of cacti in our attic under a roof covered with Russian Steel. This is really my report and the object of this article. We are not fortunate enough to own a greenhouse, and those who own a large collection need every inch of available space for our collections during the winter. I am the kind of a collector who cannot throw a cutting or even one *Opuntia* pad away, but must root it and keep it somehow. With my seedlings, besides my cuttings and large collection, I now have around 1000 plants—some space needed for winter care I would say. May I repeat again it is the combination of cold and wet, also alternate freezing and thawing, that winter kills our cacti and many of our perennials, fruit trees, bushes, etc. For weeks we may have a rainy wet spell with continuous fog. This is extremely hard on cacti.

Our home is one of the large old fashioned homes with an attic. It is covered with a Russian Steel roof (see article on cactus seed germination for details)*. For two winters I have experimented with wintering cacti here and this has been very successful. The window faces the east and the cacti receive the morning sun. The only heat is from a stove pipe from an oil heater. This stove pipe is in the middle of the attic 15 feet from the window. Its value is small and only slightly on the positive side. On average weather the difference in the temperature of the attic and the outside averages 24 degrees. A couple examples: when the thermometer is 24° below zero it reads zero in the attic; if zero outside, in the attic it is usually 24° above zero. As the temperature on the outside rises, this proportion does not hold good in the attic. At 20° above zero outdoors, in the attic it averages 40 and 42°. On a warm sunshiny afternoon the temperature outdoors has read 36 or 38, while in the attic it would read 58 to 60°. Here are some actual figures taken from my record book. The coldest day in December, 1941, was the 10th, the thermometer outdoors read 7° above zero. In the attic it read 33° above. January 7, 1942, was our coldest day, outdoors the thermometer read 25° below zero, in the attic zero. Our coldest day in February, 1942, was the 19th, and outdoors the thermometer read 2° below, in the attic it was 23° above zero. March 1st was our coldest day and the thermometer

*Vol. XIII, pg. 201.

*Bulletin, No. 12, 1942.

outdoors read 20° above, in the attic it read 38°. When the weather is zero or below we, of course, have our oil heater set up and the stove pipe is warmer and gives out more heat than when the weather outside is in the 20's or 30's above. The Russian Steel covering our roof draws the heat rays from the sun. March 22, the thermometer outside read 42° in the P. M. and in the attic it read 70°, and to reach up through the rafters and touch this roofing, it was quite warm. I wish to add that all readings taken during the winter time were taken around 7 A. M.

I do not keep any plants in there during October as on a warm afternoon the thermometer outside has read 62° in the P. M. and in the attic 84 to 86°. This unusual warmth would start them to grow again. I usually bring my cacti from a west sun porch to the attic about the middle of November. If we have a warm spell during the winter I usually water them lightly, in March I usually commence watering them about once a week.

For the past two winters I have successfully kept the following cacti without a loss, *Opuntias imbricata*, *clavata*, *basilaris aurea*, *leptocaulis*, *linguiformis*. *Echinocactus horizontalis*, *Homalocaphala texensis*, *Echinocereus viridiflorus*, *oklabomensis*, *longispinus*, *reichenbachii*, *choloranthus* also *Coryphantha neo-mexicana*. I intend to experiment with all cacti I possibly can from northern Texas, New Mexico, Arizona. I am now potting up many extra *Opuntias* and trying to acquire extra plants to experiment with this winter. I have room for around 100 pots full here, if I can successfully winter that many in my attic I have helped to solve quite a problem. It is only a few steps from my cactus garden to the attic and some difference from transporting them in a car to a greenhouse with damp temperatures. Our attic temperature would be the closest approach to the desert conditions I would know of, cold at night and on a clear day they receive sun and warmth. This space is available as we do not store anything in front of the window, as the sun shining through the glass would damage or fade many articles. If my experiments are successful this winter, next summer or fall I contemplate adding another window which will give me storage room for 150 full pots. They require less care than those kept in a hot living room or kept in a greenhouse. Even in the winter time when we have visitors, it is easy to look over the collection in the attic.

To sum it up you may not have a heated attic, or one covered with Russian Steel, but I would

advise everyone to check the temperatures this winter and if it doesn't go below zero there are many cacti that will winter successfully. In fact they will be healthier from having a lower temperature than in a super-heated room. I might add that the highest point of our attic is 8 feet above the floor and then the V-slants to within 3 inches. I am sure this steel roof is the greatest factor in keeping our attic warmer.

PROF. ARTHUR BLOCHER. BOOK REVIEW

"Plants of Ornamental Value for the Rio Grande Valley of Texas." By W. H. Friend. Published by the Texas Agricultural Experimental Station. Bulletin 609, March, 1942.

This 156 page bulletin is a summarization of the experiments of the station staff. The methods described are used in testing plants for the valley. The growing of these ornamental plants, type of soil needed, source of plants, propagation, planting, cultural care and frost protection. These hints are always useful to the grower.

Plants suitable to the valley are listed, including cacti and other succulents. The latter are divided into three groups: cacti, small succulents, and other large succulents. The climate of the valley is suitable for the raising of these attractive plants. The author states it may be necessary to grow our friends under artificial conditions. Soil drainage and full sunlight are required. Directions are given where native species may be collected. 38 species of cacti are listed and 48 species of succulents. A few words of description are given with each species mentioned.

DANIEL NEUMANN, JR.

A TIP

Subscribe to the monthly magazine "Arizona Highways" Phoenix, Arizona, (\$1 per year) and beg them to start with the December, 1942, issue. The natural color desert pictures are alone worth the yearly subscription price. All through the year this magazine will take the place of your desert trips with many fine pictures of cacti.

The November, 1942, "Sunset Magazine" (San Francisco, California) contained many excellent ideas for lath and glasshouses with construction details. If copies are available it will be the best value you ever received for a dime.

THE CACTUS AND SUCCULENT SOCIETY OF MILWAUKEE

The following is a list of new elected officers for the year 1943:

President, JOHN DEBBLER.
Vice-President, CASTEN BUCKHOLZ.
Secretary-Treasurer, ERICH SALZMANN.

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SPINE CHATS

LADISLAV CUTAK



This initial effort at column writing may blossom forth into a monthly feature if the readers desire it. For a long time the author has felt that the Cactus Journal devoted too little space to the human side of the membership, which it is believed, is just as important as all the scientific and popular articles pertaining to the cactus and succulents plants. The fact cannot be overlooked that most of us would like to become better acquainted with our fellowmen practicing our favorite hobby. This column, then, will be an attempt to fulfill this need—at least on a small scale; but in order to make it a successful venture, it will require the full cooperation of the entire membership.

"Spine Chats" also will serve to bring out pertinent information about desert plants, including comments on sundry articles appearing in various periodicals that are not usually available to the general public. In reality, the author and editor hope that "Spine Chats" will become a veritable storehouse of information for the reader. We will attempt to do our part, how about you?

I think Scott Haselton is doing a marvelous job of editing the CACTUS JOURNAL. Of all the hobby magazines none is finer than it. It is a grand idea to publish photographs of cactus people on the cover of the JOURNAL. Most of us often wonder what sort of men and women are associated with the cactus profession, and very frequently, we form mental pictures of them which are often the opposite of what they really are.

This thought brings to mind an old acquaintance of mine, and yours too, by name of Mace E. Taylor, Jr., now Sergeant in the Chemical Warfare Service of the U. S. Army. In the summer of 1938, the youthful Taylor (I doubt whether he was of voting age at the time) paid a visit to the Missouri Botanical Garden and knowing that I was connected with the institution, asked for me. After introducing myself, I don't know whether Mace was surprised or disappointed, for he exclaimed: "Gee, I thought you were a rather old gent with a Van Dyke beard and aloof disposition, but instead you're clean-shaven and fairly young yourself." By now you realize what I'm driving at, and so the moral is: continue publishing photos of cactus people in order not to disillusion the JOURNAL readers.

While on the same subject, I must confess that I was equally surprised when Dr. Leon Croizat's picture appeared on the August issue cover. Dr. Croizat has been one of my most valuable correspondents for the past nine years. All during these years I wanted to know what the distinguished gentleman looked like but was too modest to ask him for a picture. Now you see how that picture in the JOURNAL relieved my anxiety.

Dr. Croizat's pet plants used to be the *Euphorbias* and it is through an exchange of these succulents that I first began correspondence with him. Now that it is impossible to do anything with Africa, where the great majority of the cactus-like species occur, the eminent botanist has turned to cacti and promises to author

many articles on the nomenclature of these plants. His entry into the field is by no means new to him for he has always been interested in all kinds of succulents.

All of us realize that the nomenclature of cacti is in a state of chaos. We are indeed fortunate to have Dr. Croizat's poignant criticisms on the matter. The entire system of classification by Schumann, Berger, Vaupel, Britton and Rose, and others will be carefully gone over. Now this does not mean that Croizat is infallible or that we must accept every statement he makes, but I do guarantee that his research will bring forth many enlightening facts hitherto overlooked.

Aloe vera still seems to be the ace succulent when judged according to its usefulness to man. Its curative properties were known to the ancients long before the time of Christ, but it is only recently that its sticky, viscous juice has been found efficacious in the treatment of X-ray and radium burns. Readers may recall my article, "Aloe Vera as a Remedy for Burns" which was reprinted in the November, 1938, issue of the CACTUS JOURNAL. It seems that that story helped in bringing about a general use of the *Aloe vera* in the treatment of such cases. Even today, the Missouri Botanical Garden is still called upon to furnish fresh *Aloe* leaves for this purpose.

"The Medicinal Aloe Vera" is a follow-up of my original story and was written for *The American Eagle*, weekly newsmagazine published by the Korean Unity at Estero, Florida. It appeared in the September 17, 1942, issue, just in case any members might be interested further. While on this subject it is worthwhile to record Claud L. Horn's popular article on this plant, "Botanical Science Helps to Develop a New Relief for Human Suffering" in the April, 1941, issue of the Journal of the New York Botanical Garden.

Do you want your living rock cactus, *Ariocarpus fissuratus*, to assume a vigorous and healthy appearance? Then try grafting it onto any of the robust types of *Cereus* or *Lemaireocereus*. You will be surprised at the transformation.

"A Short List of Plants from Cedros Island, Lower California" is an interesting bit of news recently published by John Thomas Howell in Leaflets of Western Botany (3: 180-185, November, 1942). I say "interesting" because the article mentions six succulents native to that island, two of which were not previously recorded from Cedros. These two are *Cereus Pringlei* and *Echeveria linearis*. The former is better known to Britton & Rose fans as *Pachycereus Pringlei*, a truly important cactus in northwestern Mexico and in Lower California, where it often is a dominant plant in the landscape. Howell was a member of the Templeton Crocker Expedition to the Galapagos Islands in 1932 and when it paused at Cedros Island, off the middle western coast of Lower California, for a brief stay, he conducted a short plant excursion into the interior. As a result, the above plants were collected, along with *Agave sebastiani*, *Echinocereus maritimus*, *Echinocactus (Feroactus) chrysacanthus*, and *Mammillaria (Cochemiea) Pondii*.

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* * *

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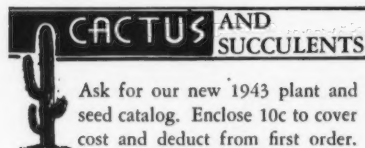
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